



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, Secretary & CEO
Jonathan L. Gulliver, Highway Administrator



February 5, 2020

RE: 2020 Hot Mix Asphalt

Dear Hot Mix Asphalt Plant Owners, Operators, and Contractors:

In this letter please find updates to MassDOT's asphaltic materials requirements for the 2020 construction season.

1. **Specifications** – As you are aware, at the beginning of 2019 MassDOT incorporated Sections 450, *Hot Mix Asphalt* and M3, *Asphaltic Materials* into its Standard Specifications. Throughout the rest of the year MassDOT and FHWA, in collaboration with Industry, updated other asphaltic specifications to be incorporated into the Standard Specifications as well. At this time the majority of asphaltic specifications have been updated to include current materials and practices, including Quality Assurance requirements. The updated specifications include:
 - Section 415 Milling
 - Section 460 Hot Mix Asphalt for Local Streets
 - Section 470 Hot Mix Asphalt Berms
 - Section 472 Temporary Asphalt Patching
 - Section 702 Hot Mix Asphalt Sidewalks and Driveways

The individual specifications can be found on the MassDOT QA SharePoint site. I would like to point out that MassDOT recently approved a brand-new *Standard Specifications for Highways and Bridges*. These will go into effect for any projects advertised after February 1, 2020. The new specifications book can be found on MassDOT's website at <https://www.mass.gov/lists/construction-specifications>. Please remember to read through contract documents as we have inserted updated asphaltic special provisions while awaiting the final rollout of the new Standard Specifications.

For municipal work under Chapter 90, recipe mixes meeting the Department's previous standards will continue to be accepted as MassDOT approved mixtures, where specified. As was stated in previous years, MassDOT is committed to making sure that there is an adequate transition time. The current expectation is that all new contracts after July 1, 2020 will be mandated to utilize the new requirements. Contracts that open bids prior to this time will be allowed to provide mixtures that were approved at the time of bid opening.

All approved Recipe Hot Mix Asphalt (HMA) job mix formulas (JMF) from the 2017 construction season or later that have not changed in materials or formulation will be allowed for use in 2020. New or updated JMFs must be submitted for approval.

All JMF submissions are required to be filled out, signed, scanned as a .pdf, and submitted by email to the MassDOT Research & Materials Section at massdothma@dot.state.ma.us.

2. **HMA Mix Designs** – Superpave mix design approvals will be transitioning to a new submittal process. For all new Laboratory Trial Mix Formulas (LTMFs), mix designs shall be submitted using the new Excel “HMA Mix Design Workbook.” LTMFs that were approved in 2018 or 2019 may be resubmitted as Design Mix Formulas (DMFs) following the 2019 DMF approval process. All LTMFs and DMFs shall now be submitted through the MassDOT QA SharePoint site under the new “HMA” tab. The SharePoint site can be accessed at www.massdotqa.com. If you are an HMA Producer who:

- Is new to the QA SharePoint site;
- Is expecting to submit LTMFs and does not already possess a MassDOT approved Superpave design;
- Has any questions regarding how to fill out and/or submit mix designs;

You must email massdothma@dot.state.ma.us for assistance. Submittals that do not follow this procedure will not be processed.

3. **Plants and Labs** – MassDOT Research & Materials (RMS) is in the process of scheduling MassDOT/NETTCP HMA Quality Control plant/lab inspections. If you do not receive your inspection request by February 7th please email Maggie McDonald at Maggie.McDonald@dot.state.ma.us. Plants and labs that are not inspected by RMS will not be listed on the QCML.

In 2020 the QA SharePoint site will also house all HMA Producer Quality System Manuals (QSM), and PG Binder/Emulsion Supplier QC Plans and Monthly Certifications. These must be uploaded to the Producer/Supplier’s folder under the “HMA” tab. The HMA QSM requirements have been updated to include the following:

Asphalt Release Agent utilized at the HMA plant:

7.1 Constituent material types and sources of supply - list the specific types of constituent materials used for production of standard manufactured materials. All sources of supply of constituent materials shall be identified along with the source (ie. Aggregate and Binder) Asphalt Release Agent utilized shall be listed as well.

7.2 A statement identifying that the MassDOT QCML has been consulted and the products utilized are approved and listed on the MassDOT QCML. (ie. Asphalt Binder, ARA, WMA, etc.)

The HMA round robin results are due back to the CAP Lab at UConn by Friday, February 7th. All HMA plants which are expected to produce for MassDOT projects are required to participate in the round robin. Lab inspections will not take place until round robin results are submitted to the CAP lab.

4. **Independent Assurance** - In 2020, the Independent Assurance program will run through Richard Mulcahy (Richard.Mulcahy@dot.state.ma.us). In order to ensure that MassDOT meets its federally mandated requirements, each Contractor must provide a list of employees who are expected to perform testing used for acceptance. This list should be included in the lab's 2020 QSM. The QSM should be clear on which technicians test under Section 450 and which, if any, do not. All 2019 IA reports can be found on the QA SharePoint site under the HMA tab. Reports were saved with each Producer's folder.
5. **Qualified Construction Materials List** – RMS continues to maintain MassDOT's Qualified Construction Materials List (QCML) which can be found on MassDOT's website at <https://www.mass.gov/service-details/qualified-construction-materials-list>. Please remember that there are several product categories found on the QCML that relate to asphaltic materials. Only products found on the QCML are to be used on MassDOT projects. The product categories include:
 - Asphalt Emulsion Suppliers
 - Asphalt Release Agents
 - Hot Mix Asphalt Production Facilities
 - Hot Poured Joint Sealer & Hot Applied Asphaltic Crack Sealer
 - Liquid Anti-strip
 - PG Asphalt Binder Suppliers
 - WMA Additives
6. **Additional Material Testing** – In 2020, MassDOT will continue to explore additional ways to test materials. This will include Hamburg and SCB testing of plant produced material. District Lab or RMS personnel will be sampling out of trucks at the plant at periodic points throughout the paving season. This data will be used to establish performance criteria for production sampling and testing in the future.


MassDOT will also sample materials for Fourier Transform Infrared Spectroscopy (FTIR) testing. District and RMS personnel may request a sample of on-site material at the production facility for FTIR fingerprinting to ensure that chemical compositions have not changed from what was originally approved. When samples are taken, it is expected that the Contractor will provide the bill of lading and safety data sheet for that load of material. Materials to be sampled and tested are:

- Asphalt Release Agents

- WMA additives
- Polymer (from PG Binder/Emulsion Supplier)

If there are any additional questions please feel free to contact Mark Brum, Materials Quality Systems Engineer, at (857) 368-3421 or Mark.Brum@dot.state.ma.us.

Sincerely,



Clement W. Fung, P.E.
Acting Director of Research & Materials

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